

Enders Reservoir

2011 Survey Summary



Nebraska Game and Parks Commission

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Fish populations are sampled each fall at Enders using gill nets, a method commonly used to sample fish found in open water, such as walleye, white bass, channel catfish and hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability and allow for trend comparisons of species abundance and size distributions. However, environmental factors can play a strong role in catch rate and composition. For this reason biologists base management decisions on trend and it may take several seasons to see a change in the fishery.

The fishery at Enders has been really good since 2007. Data collected in 2011 suggests that the trend will continue. However, we may be starting to see some decline especially in white bass numbers. Walleye numbers are still good with a catch rate of 20 fish per net with sufficient numbers over 15 inches. White bass numbers have decreased to 14 fish per net which really is not terrible. There appears to be very limited recruitment of white bass and the population we have now is primarily from the 2007 and 2008 year classes. It may be necessary to supplement the white bass population through stocking in the future if new year classes remain absent. Wiper numbers have been on a steady decline which is no surprise because stockings were suspended in 2005. Most remaining wipers are nearing the end of their lives and will probably be gone in the next couple years. Catfish numbers have stabilized at 8 fish per net. Catfish are stocked regularly in order to maintain a population due to the lack of natural recruitment.

Smallmouth bass and muskellunge populations are additional components of the Enders fishery. Smallmouth bass can be caught throughout the year along the dam and rocky points. Muskellunge were introduced to Enders in 2006 and have grown to lengths greater than 30 inches. A total of 758 – 12” muskellunge were stocked on March 25, 2011.

It is important to mention a couple regulations at Enders reservoir. Currently there is a 30 inch length limit on northern pike and a 40 inch length limit on muskellunge. Anglers should take care to make a positive I.D. on these species before harvesting a fish.

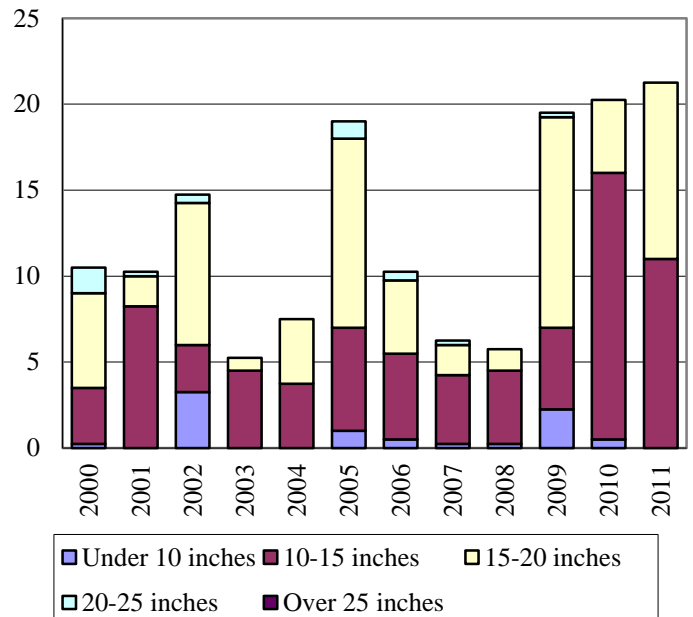
The following text and graphs describe the total number of select species caught per gill net and the relative abundance of fish within several length categories. For comparative purposes it also shows results from previous years.

Walleye

Walleye catch rates have been elevated and stable since 2009. Biologist caught 20 fish per net in 2011. Those fish were divided evenly into two length groups. There should be good numbers of “eater” walleyes available for a few years to come.

Walleye are stocked annually at Ender’s because natural recruitment is limited. 1.6 million walleye fry were stocked in 2011 and 968,000 walleye fry are requested for 2012. Fry have been stocked for several years at Enders and are working well. Fry are stocked by boat in mid to late April.

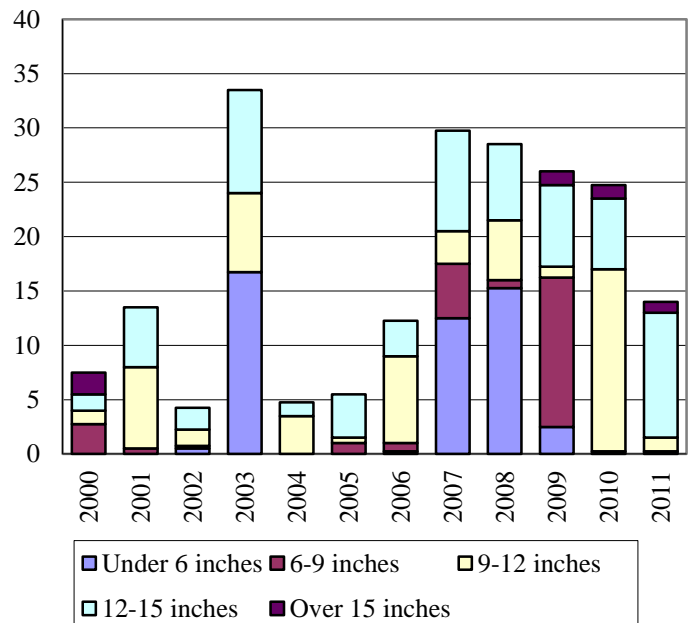
Catch Per Unit Effort



White Bass

Biologist caught 14 white bass per net in 2011 which is down from 25 fish per net in 2010. The data suggests that there was a large year class that coincides with the 2007 high water event. This year class has been tracking through the system. Those fish can be seen in 2007-08 as the large blue portion of the graph. Those same fish moved up into the 6-9 inch range in 2009, the 9-12 inch range in 2010, and finally the 12-15 inch range in 2011. If the growth continues then there should be good numbers of very large white bass available in 2012. The bad news is that once these fish are gone there is a lack of small fish in the populations and it may be necessary to request white bass stockings to supplement the population.

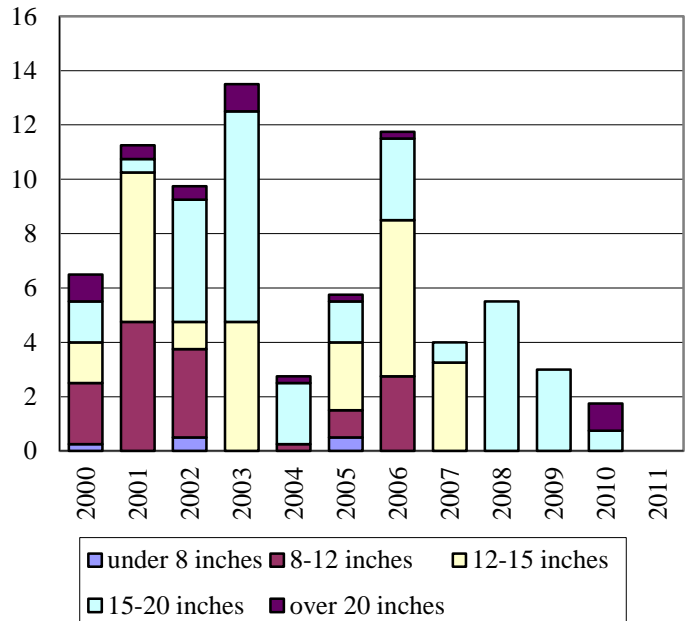
Catch Per Unit Effort



Wiper

Hybrid striped bass have not been stocked into Enders since 2005 due to an increased emphasis on white bass production. This decision is also based on recent creel data which indicates that very few anglers are specifically targeting wipers and that anglers are harvesting wipers before they reach trophy status. In essence wipers are being used as a replacement for white bass. Due to competition, between the species biologists have decided to concentrate on white bass management at Enders because they reproduce naturally and meet the current angler requirements. No wipers were sampled in 2011. It is likely that most of the wipers in Enders have either been harvested or died.

Catch Per Unit Effort

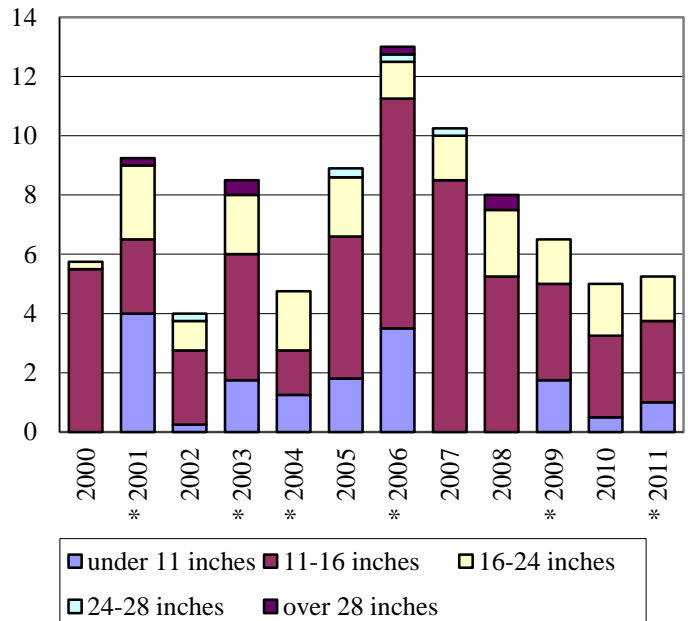


Channel Catfish

The catch rate of channel catfish seems to have stabilized compared to the last few years data. In 2011 biologist caught 5 fish per net. Those fish were pretty evenly distributed in size up to 24 inches.

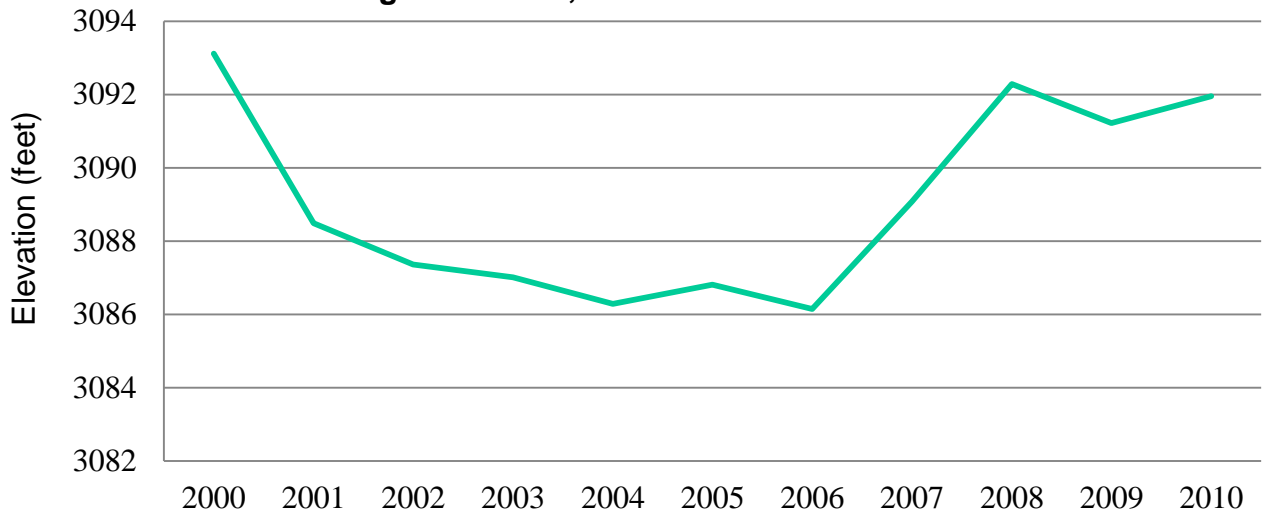
Channel catfish are stocked regularly in Enders reservoir due to limited recruitment. Channel catfish are stocked every other year in order to maintain a population for anglers. Channel catfish will be stocked in 2013 and the Game and Parks stocked 12000 channel catfish in 2011 and 10900 fish in 2009. These fish are 10-12 inches long at the time of stocking

Catch Per Unit Effort



* Indicates stocking year

Average Elevation, Enders Reservoir 1999-2010



Water levels remain a management concern and contribute to reduced habitat quality, recreational opportunities, and fishing quality at Enders Reservoir. Since 2008, water levels have dropped but have been slowly creeping upward. Currently the reservoir is operating at a low but stable level. No water has been released for irrigation use since 2002 due to poor inflows.



Northern Pike

Description: Large, tubular-shaped, native fish having a single dorsal fin near the forked tail, duckbill-shaped snout, large mouth with many sharp teeth, and 5 sensory pores on each side of the lower jaw's underside. Its cheek is fully scaled, while the gill cover is scaled only on the upper half. 30 inch minimum length limit 3 fish daily bag



Muskellunge

Description: Large, tubular-shaped, non-native fish having a single dorsal fin near the forked tail, duckbilled-shaped snout, large mouth with many sharp teeth, and 6 or more pores on each side of the lower jaw's underside. Both the gill cover and cheek are scaled on their upper halves. 40 inch minimum length limit 1 fish daily bag